

REMARKSTelephonic Interview Request

If after reviewing the instant response and amendment the Examiner believes a telephonic interview would expedite prosecution of this application; Applicants invite the Examiner to call Applicants' representative as noted below.

Status of the Claims*Pending claims*

Claims 1, 2, 6, 12, 16, 29, 47 to 62, 68 to 75, 87, 88, 95 to 107, 111 to 115, 117 to 122 and 130 to 152 and 130 to 152, are pending; claims 49 to 62, 68 to 73, 95 to 100, 107, 111 to 115, 117 to 122, and 133 to 152, are withdrawn; and, claims 1, 2, 6, 12, 16, 29, 47, 48, 74, 75, 87, 88, 101 to 106 and 130 to 152 are pending and under consideration.

*Allowed claims*

Applicants thank the Examiner for finding that claims 1, 6, 12, 16, 29, 47 and 48 are allowable.

*Outstanding Rejections*

Claims are rejected under 35 U.S.C. §112, first paragraph.

Applicants respectfully traverse all outstanding objections to the specification and rejection of the claims.

Support for the claim amendments

The specification (see this application's publication U.S. Pat. App. No. 20030170634) sets forth an extensive description of the invention in the new and amended claims. For example, support for claims using the amylase-encoding nucleic acids of this invention in drilling processes such as oil field drilling processes can be found, inter alia, in paragraphs [0003], [0045] and [0081] of the '634 specification. Applicants respectfully submit that no new matter is introduced by the instant amendment.

Applicants respectfully request entry of the amendments set forth in this response under 37 CFR §1.116. The amendment places the case in condition for allowance and places the case in

better condition for appeal; the amendment does not raise any issues of new matter; and, the amended claims do not present new issues requiring further consideration or search.

Rejoining claims under *In re Ochiai*

Applicants respectfully request that after the elected product claims have been found to be allowable all withdrawn process (methods) claims which depend from or otherwise include all of the limitations of the allowed product claims be rejoined. MPEP §821.04; pg 800-63 to 800-70, 8th Ed., Rev. 3, Aug. 2005; *In re Ochiai*, 37 USPQ2d 1127 (Fed. Cir. 1995); *In re Brouwer*, 37 USPQ2d 1663 (Fed. Cir. 1995); 1184 OG 86, 3/26/96.

Applicants respectfully request that after the elected product claims have been found to be allowable, the withdrawn process (methods) claims of Groups IV, VII, VIII, IX, XI, XIII, XIV, XV, XVI, XVIII and XIX; and claims 133 to 152, added in Applicants' last response, should be rejoined.

Issues under 35 U.S.C. §112, first paragraph

Written Description

Claims 2, 74 to 88, 101 to 106 and 130 to 132 stand rejected under 35 U.S.C. §112, first paragraph, written description requirement, for reasons set forth on pages 3 to 5, of the OA.

New matter

Claims 2, 74 to 88, 101 to 106 and 130 to 132 stand rejected under 35 U.S.C. §112, first paragraph, written description requirement, as allegedly containing "new matter", for reasons set forth on pages 3 to 4, of the OA. The instant amendment addresses these issues.

For example, as suggested by the Office, in claim 2, the term "0.15 NaCl" is deleted and conditions for washing as expressly set forth in paragraph [0190] of the '634 specification are added. Claim 2 also is amended to include conditions for hybridization as expressly set forth in paragraph [0072] of the '634 specification:

[0072] For example, hybridization under high stringency conditions could occur in about 50% formamide at about 37°C to 42°C. Hybridization could occur under reduced stringency conditions in about 35% to 25% formamide at about 30°C. to 35°C. In particular, hybridization could occur under high stringency conditions at 42°C. in 50% formamide, 5x SSPE, 0.3% SDS, and 200 n/ml sheared and denatured salmon sperm DNA....

Claims 74, 75, 87 and 88 stand rejected under 35 U.S.C. §112, first paragraph, written description requirement, as allegedly containing “new matter”, for reasons set forth on pages 4 to 5, of the OA. The Office expressed concerns regarding support for limiting the claimed nucleic acid probe lengths to the specific sizes set forth in the specification, together with the specific sequence identities set forth in the specification.

However, Applicants respectfully note that the specification does expressly support embodiments directed to nucleic acids having at least 97% identity over at least 75 or 100 consecutive nucleotides of SEQ ID NO:1, or at least 95% identity over at least 150 and 200 consecutive nucleotides of SEQ ID NO:1, or at least 90% identity over at least 300, 400, 500 or more consecutive nucleotides of SEQ ID NO:1, can be found, inter alia, in paragraph [0194] of the ‘634 specification:

[0194] For example, the preceding methods may be used to isolate nucleic acids having a sequence with at least about 97%, at least 95%, at least 90%, at least 85%, at least 80%, at least 70%, at least 65%, at least 60%, at least 55%, or at least 50% homology to a nucleic acid sequence selected from the group consisting of one of the sequences of SEQ ID NO: 1 nucleic acid sequences, and sequences substantially identical thereto, or fragments comprising at least about 10, 15, 20, 25, 30, 35, 40, 50, 75, 100, 150, 200, 300, 400, or 500 consecutive bases thereof, and the sequences complementary thereto.

Accordingly, the written description rejection under section 112, first paragraph, can be properly withdrawn.

#### Enablement

Claims 74, 75, 87 and 88 stand rejected under 35 U.S.C. §112, first paragraph, enablement requirement, as allegedly not described in the specification in such a way as to enable one skilled in the art to which it pertains to make and/or use the invention, for reasons set forth on pages 5 to 10, of the OA. The instant amendment, as noted above, should address these issues and the Office’s concerns. Accordingly, the enablement rejection under section 112, first paragraph, can be properly withdrawn.

### CONCLUSION

In view of the foregoing amendment and remarks, it is believed that the Examiner can properly withdraw the rejection of the pending claims under 35 U.S.C. §112, first paragraph. Applicants believe all claims pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. **564462006000**. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

By /Gregory P. Einhorn/

Gregory P. Einhorn  
Registration No.: 38,440  
MORRISON & FOERSTER LLP  
12531 High Bluff Drive, Suite 100  
San Diego, California 92130-2040  
direct dial 858 720 5133  
general office 858 720 5100  
fax direct 858 523 5933  
fax office 858 720 5125  
Email geinhorn@mofo.com